Attorney's Docket No.: 12406-155001 / P2004,0388 US

Applicant : Gupta et al.
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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application;

Listing of Claims:

(Currently Amended) An organic electronic device, comprising:
 a deposition surface having at least one deposition region defined thereon:

a plurality of organic layers, wherein each said organic layer is in said deposition region on said deposition surface and a first portion of at least one of said organic layers is cross-linked so that the first portion is insoluble in an organic solution, and the first portion includes one of a silane, an ester, a di-aromatic bromide, a photo-acid, an amide, an amine, a multivalent cation, or an acidic group as a cross-linking material.

- (Previously Presented) A device according to claim 1 wherein said plurality of
 organic layers includes at least a first organic layer and a second organic layer, the first organic
 layer being closer to the deposition surface than the second organic layer and the first organic
 layer being a cross-linked organic layer.
- (Previously Presented) A device according to claim 2 wherein said plurality of organic layers includes a hole transport layer.
- 4. (Previously Presented) A device according to claim 3 wherein at least one layer of said plurality of organic layers is capable of performing at least one of a hole blocking function, an electron blocking function, an electron transport function, a hole transport function, an optical confinement/wave-guiding function, an electron injection function, a hole injection function, an emission function, an absorption function, or a chemical, physical or photophysical sensor function.

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(Canceled)

(Previously Presented) A device according to claim 1 wherein at least one of the
organic layers is formed from an organic solution that includes cross-linking groups.

 (Previously Presented) A device according to claim 1 wherein at least one of the organic layers is formed from an organic solution that includes an initiating agent.

8. (Canceled)

 (Previously Presented) A device according to claim 1 wherein said organic electronic device is an OLED device.

- (Previously Presented) A device according to claim 9 wherein said deposition surface is a lower electrode layer.
- (Currently Amended) A device according to claim 10 wherein at least one of said plurality of organic layers is an emissive layer, said emissive layer <u>capable of</u> emitting light upon charge recombination.
- (Original) A device according to claim 11 further comprising a cathode layer disposed over said plurality of organic layers.
- (Previously Presented) A device according to claim 3 wherein said hole transport layer is fabricated from a PEDOT:PSS solution including constituents capable of cross-linking.
- (Original) A device according to claim 1 wherein said device behaves as an organic transistor.

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 (Original) A device according to claim 1 wherein said device behaves as an organic opto-electronic device.

- 16. (Previously Presented) A device according to claim 1 wherein said plurality of organic layers includes at least a first layer and a second layer and the first layer includes a different material from the second layer.
- (Previously Presented) A device according to claim 3 wherein said hole transport layer is configured to perform an electron blocking function.
- (Previously Presented) A device according to claim 3 wherein said hole transport layer is configured to perform a wave-guiding function.
- (Previously Presented) A device according to claim 4 wherein a single organic layer of the plurality of organic layers performs said electron transport and hole blocking functions.
- 20. (Previously Presented) A device according to claim 4 wherein said electron transport function is performed in an organic layer of said plurality of organic layers.
- (Previously Presented) A device according to claim 4 wherein said wave-guiding function is performed in an organic layer of said plurality of organic layers.
- (Previously Presented) A device according to claim 4 wherein said electron injection function is performed in an organic layer of said plurality of organic layers.
 - 23. (Previously Presented) The device of claim 1, wherein:

the plurality of organic layers includes a hole transport layer, an emissive layer on the hole transport layer, an electron transport layer on the emissive layer and an electrode injection Applicant : Gupta et al. Attorney's Docket No.: 12406-155001 / P2004,0388 US Serial No. : 10/812,568 F.1

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layer on the electron transport layer; and

one of the emissive layer or the electron transport layers is cross-linked.

- 24. (Previously Presented) The device of claim 2, wherein at least one of the first and second organic layers is an emitting layer or contains a light-responsive material.
- (Previously Presented) The device of claim 1, wherein the deposition surface includes an electrode.
 - (Currently Amended) An organic electronic device, comprising:
 a deposition surface: and

a plurality of organic layers, wherein a first portion of said organic layers is cross-linked to render said first portion of said organic layers insoluble;

wherein at least one cross-linking agent in the first portion adds functionality to the first portion that the first portion does not have without the cross-linking agent and the cross-linking agent adds the functionality in addition to cross-linking the first portion.

- 27. (Previously Presented) The device of claim 26, wherein the functionality added by the cross-linking agent is one of hole transport, electron transport, electron injection, hole blocking, optical confinement or waveguiding.
- 28. (Currently Amended) The device of claim 27, wherein at least one of the first and or second organic layers is an emitting layer or contains a light-responsive material.
- 29. (Previously Presented) The device of claim 26, wherein said plurality of organic layers includes at least a first organic layer and a second organic layer, the first organic layer being closer to the deposition surface than the second organic layer and the first organic layer being a cross-linked organic layer.

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 (Previously Presented) The device of claim 29, wherein said plurality of organic layers includes a hole transport layer.

- (Previously Presented) The device of claim 30, wherein said hole transport layer is fabricated from a PEDOT:PSS solution including constituents capable of cross-linking.
- 32. (Previously Presented) The device of claim 30, wherein said hole transport layer is configured to perform an electron blocking function.
- (Previously Presented) The device of claim 30, wherein said hole transport layer is configured to perform a wave-guiding function.
- (Previously Presented) The device of claim 33, wherein said electron injection function is performed in an organic layer of said plurality of organic layers.
- (Previously Presented) The device of claim 33, wherein said wave-guiding function is performed in an organic layer of said plurality of organic layers.
- 36. (Previously Presented) The device of claim 30, wherein at least one layer of said plurality of organic layers is capable of performing at least one of a hole blocking function, an electron blocking function, an electron transport function, a hole transport function, an optical confinement/wave-guiding function, an electron injection function, a hole injection function, an emission function, an absorption function, or a chemical, physical or photophysical sensor function.
- 37. (Previously Presented) The device of claim 36, wherein a single organic layer of the plurality of organic layers performs said electron transport and hole blocking functions.
- (Previously Presented) The device of claim 36, wherein said electron transport function is performed in an organic layer of said plurality of organic layers.

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 (Previously Presented) The device of claim 26, wherein at least one of the organic layers is formed from an organic solution that includes cross-linking groups.

- (Previously Presented) The device of claim 26, wherein at least one of the organic layers is formed from an organic solution that includes an initiating agent.
- 41. (Previously Presented) The device of claim 26, wherein said organic electronic device is an OLED device.
- 42. (Previously Presented) The device of claim 41, wherein said deposition surface is a lower electrode layer.
- 43. (Currently Amended) The device of claim 42, wherein at least one of said plurality of organic layers is an emissive layer, said emissive layer <u>capable of</u> emitting light upon charge recombination.
- (Previously Presented) The device of claim 43, further comprising a cathode layer disposed over said plurality of organic layers.
- 45. (Previously Presented) The device of claim 26, wherein said device behaves as an organic transistor.
- (Previously Presented) The device of claim 26, wherein said device behaves as an organic opto-electronic device.
- 47. (Previously Presented) The device of claim 26, wherein said plurality of organic layers includes at least a first layer and a second layer and the first layer includes a different material from the second layer.

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48. (Previously Presented) The device of claim 26, wherein the deposition surface includes an electrode

49 (Currently Amended) The device of claim [[23]]26, wherein:

the plurality of organic layers includes a hole transport layer, an emissive layer on the hole transport layer, an electron transport layer on the emissive layer and an electrode injection layer on the electron transport layer; and

one of the emissive layer or the electron transport layers is cross-linked.

50. (Currently Amended) An organic electronic device, comprising:

a deposition surface having at least one deposition region defined thereon, wherein each deposition region is formed by a pocket in a layer of resist with a pocket therein, the pocket defining a deposition region on a deposition surface; and

a plurality of organic layers including an emissive layer, wherein each said organic layer is in said deposition region on said deposition surface and a first portion of the emissive layer is cross-linked so that the first portion is insoluble in an organic solution.